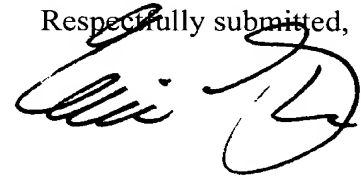


REMARKS

The purpose of this Preliminary Amendment is to insert a cross-reference to related applications on the first page of the description and to amend the claims to eliminate multiple dependencies and to employ terminology more appropriate for U.S. prosecution.

No new subject matter has been added.

Respectfully submitted,



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December 20, 2001

MARKED-UP VERSION OF THE CLAIMS

1. A method [for] of increasing the triacylglyceride content of an organism
[characterised by] which comprises expressing in the organism an introduced
DNA encoding a protein having glycerol 3-phosphate acyltransferase (GPAT)
activity.
2. [A] The method [according to] of claim 1, [*characterised in that*] wherein the
organism is a plant.
3. [A] The method [according to] of claim 2, [*characterised in that*] wherein the
plant is an oilseed bearing plant.
4. [A] The method [according to] of claim 2, [*characterised in that*] wherein the
plant is of the genus *Brassica*.
5. [A] The method [according to] of claim 2, [*characterised in that*] wherein the
plant is *Arabidopsis thaliana*.
6. [A] The method [according to] of claim 1, [*characterised in that*] wherein the
organism is a yeast.
7. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of
claim 1, wherein the DNA encodes a protein comprising a sequence that differs
from SEQ ID NO: 6 but has at least 70% sequence homology with SEQ ID NO: 6
and the same function as the protein of SEQ ID NO: 6.
8. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of
claim 1, wherein the DNA comprises a sequence encoding a protein comprising
SEQ ID NO: 6.
9. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of
claim 1, wherein the DNA encodes a protein comprising a sequence that differs
from SEQ ID NO: 9 but has at least 70% sequence homology with SEQ ID NO: 9
and the same function as the protein of SEQ ID NO: 9.

10. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of claim 1, wherein the DNA comprises a sequence encoding a protein comprising SEQ ID NO: 9.
11. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of claim 1, wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 1, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 1.
12. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of claim 1, wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 2, or a or a variant thereof having at least 70% sequence identity to SEQ ID NO: 2.
13. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of claim 1, wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 3, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 3.
14. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of claim 1, wherein the DNA is a DNA having a [a] sequence as recited in SEQ ID NO: 4, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 4.
15. [A] The method [according to any one of claims 1 to 6, *characterised in that*] of claim 1, wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 5, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 5.
16. A method [for] of increasing the triacylglyceride content of an organism by transforming the organism with a vector, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 6, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 6.

17. A method [for] of increasing the triacylglyceride content of an organism by transforming the organism with a vector, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 7, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 7.
18. A method [for] of increasing the triacylglyceride content of an organism by transforming the organism with a vector, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 8, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 8.
19. A method [for] of increasing the triacylglyceride content of an organism by transforming the organism with a vector, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 9, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 9.
20. A method [for] of increasing the triacylglyceride content of an organism by transforming the organism with a vector, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 10, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 10.
21. A non-human organism transformed with a DNA, [*characterised in that*] wherein the DNA encodes a protein having GPAT activity, and the organism, after transforming, has enhanced ability to produce triacylglycerides (TAGs).
22. [An] The non-human organism [according to] of claim 21, [*characterised in that*] wherein the organism is a plant.
23. [A] The non-human organism [according to] of claim 21, [*characterised in that*] wherein the organism is an [oil seed] oilseed bearing plant.

24. [A] The non-human organism [according to] of claim 22, [*characterised in that*] wherein the plant is a member of the genus *Brassica*.
25. [A] The non-human organism [according to] of claim 21, that is *Arabidopsis thaliana*.
26. [A] The non-human organism [according to] of claim 21, [*characterised in that*] wherein the organism is a yeast.
27. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA encodes a protein comprising SEQ ID NO: 6, or a protein having the same function comprising a sequence having at least 70% sequence homology with SEQ ID NO: 6.
28. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA encodes a protein comprising SEQ ID NO: 7, or a protein having the same function comprising a sequence having at least 70% sequence homology with SEQ ID NO: 7.
29. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA encodes a protein comprising SEQ ID NO: 8, or a protein having the same function comprising a sequence having at least 70% sequence homology with SEQ ID NO: 8.
30. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA encodes a protein comprising SEQ ID NO: 9, or a protein having the same function comprising a sequence having at least 70% sequence homology with SEQ ID NO: 9.
31. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA encodes a protein comprising SEQ ID NO: 10, or a protein having the same function comprising a sequence having at least 70% sequence homology with SEQ ID NO: 10.
32. [A] The non-human organism of claim 21, [according to any one of claims 21 to

- 26] of claim 21, [*characterised in that*] wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 1, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 1.
33. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 2, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 2.
34. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 3, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 3.
35. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 4, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 4.
36. [A] The non-human organism [according to any one of claims 21 to 26] of claim 21, [*characterised in that*] wherein the DNA is a DNA having a sequence as recited in SEQ ID NO: 5, or a variant thereof having at least 70% sequence identity to SEQ ID NO: 5.
37. A vector for genetically transforming an organism, [*characterised in that*] wherein the vector comprises a DNA encoding a protein having GPAT activity, and the organism, after transforming, exhibits enhanced production of triacylglycerides.
38. [A] The vector [according to] of claim 37, [*characterised in that*] wherein the vector comprises DNA encoding a protein comprising SEQ ID NO: 6, or a protein having the same function comprising a sequence having at least 70% sequence homology with SEQ ID NO: 6.

39. [A] The vector [according to] of claim 37, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 7, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 7.
40. [A] The vector [according to] of claim 37, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 8, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 8.
41. [A] The vector [according to] of claim 37, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 9, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 9.
42. [A] The vector [according to] of claim 37, [*characterised in that*] wherein the vector comprises a DNA encoding a protein comprising SEQ ID NO: 10, or a protein having the same function comprising a sequence having at least 70% homology with SEQ ID NO: 10.
43. A method [for] of modifying the fatty acid composition of triacylglycerides produced by an organism, [*characterised in that*] wherein the organism is transformed with a DNA encoding a protein having GPAT activity.